

Program: Control of Hazardous Energy – Lock-out/tag-out

Facility: Waimanalo Gulch Sanitary Landfill

Facility Location: 92-460 Farrington Highway, Kapolei, HI 96707

#### **PURPOSE**

Requirements for the use of lock-out / tag-out techniques to protect personnel exposed to potentially hazardous energy sources during inspection, service or maintenance of vehicles, heavy equipment, machines or equipment (collectively referred to as equipment in this document).

#### **EXCLUSIONS**

This standard does not apply to work on cord and plug connected electrical equipment where exposure to the hazard is controlled by removing the plug that then remains under exclusive control of the employee performing the service or maintenance.

# **REQUIREMENTS**

- 1. Identify and prepare a list of vehicles, equipment and machine types requiring lock-out/tag-
- 2. Identify affected employees (those who operate or work near equipment where LO/TO may be used) and authorized employees (those who install LO/TO devices).
- 3. Ensure new or modified equipment is capable of being locked out.
- 4. Provide lockout devices, including uniquely keyed locks used only for lockout purposes. Locks must be unique in size, shape or color. Provide tag-out devices if used.
- 5. Develop operational and/or equipment specific energy control procedures for the equipment and operations, listed in the proceeding. Prepare a procedure for each group of similar equipment where practical (same energy sources and same energy controls).
- 6. Require supervisors to observe, on an annual basis, lock-out/tag-out performed by every authorized employee and certify their competence. Document the observation results. The observation record must include the machines or equipment, the names of the employees, the date of the observation and certification by the observer.
- 7. Notify contractors of the lock-out/tag-out program, making them aware of the district requirements. Ensure contractors notify the district of the contractor's lock-out/tag-out procedures.



- 8. Review the program annually, including review of procedures and implementation.
- 9. Train *authorized* employees to properly lock-out/tag-out the specific equipment they service or maintain.
- 10. OSHA also specifies the training of "other" employees simply, those who may walk through or visit an area where lock-out/tag-out is ongoing, but employees who do not fall under the "affected" category.
- 11. Provide training for supervisors and employees responsible for developing equipment-specific procedures.
- 12. Retrain employees when there are changes affecting lock-out/tag-out, or changes in job assignments, equipment, operations, or procedures.
- 13. Document training using the Safety Training Attendance Form.

#### INTRODUCTION

Lockout and tag-out are safety procedures to protect employees from hazardous energy during inspecting, maintenance, servicing, and troubleshooting of equipment, machinery, vehicles and heavy equipment.

The lock-out/tag-out program contains the following elements:

- Core program. Provides the standard method for complying with the company and regulatory requirements.
- Facility-specific information. Identifies information such as responsibilities, site-specific equipment, and location of procedures, training details, etc.

## **CORE PROGRAM**

This program covers how to shut down equipment, isolate energy sources, apply and remove locks and tags, and verify that stored hazardous energy is not present.

The types of energy release that could cause injury when released include:

- Air pressure
- Mechanical
- Chemical reaction
- Flammability
- Hydraulic pressure
- Gravity
- Electrical

**Equipment can have more than a single energy source.** For example, an air compressor could have main power, control power, and stored air pressure. That is why this standard requires a written equipment-specific procedure for equipment.

Certain types of equipment do not require equipment-specific procedures



The basic protective mechanism is to shut down the equipment, set all controls in the "off" position and lock each control. Each employee has his or her own unique key(s) and lock(s) that must be applied to each control. Authorized employees may use a tag to warn others not to start equipment *only* when controls cannot be locked. In this case, the employer has the responsibility to secure the equipment to protect it from being accidentally energized. (For example, placing a responsible person at the switch for the entire maintenance activity to ensure no one touches the switch.)

#### Responsibility

Program Administrator:

- Ensures operational or equipment-specific energy control procedures are prepared and revised, as needed.
- Makes sure workers follow established lock-out/tag-out practices.
- Ensures that employees receive appropriate training.
- Performs an annual review of program effectiveness.

Authorized employees are those who directly participate in the use of lock-out/tag-out procedures. Authorized employees:

- Are responsible for following the lock-out/tag-out procedures described in this program and equipment-specific energy control procedures.
- Authorized employees must place and remove their own locks. No one is allowed to place or remove someone else's lock.
- Are issued individual locks, tags, and lockout devices.
- Receive training in the general requirements of the program, as well as, the established equipment-specific procedures.

Affected employees are those who operate or use machines or equipment subject to lockout/tagout procedures, or those who work in an area where servicing or maintenance is being performed under lockout/tag-out. Affected employees are responsible for staying away from equipment that has been locked out.

# Provide Uniquely Keyed Locks for Each Authorized Employee

All authorized employees are issued their own individually keyed lock(s) to lock out equipment. When locking out equipment is not possible, employees will use a tag to warn others not to start equipment.



# **Prepare Equipment-Specific Procedures**

Develop and provide written operational or equipment-specific procedural steps for shutting down, isolating, blocking, and securing a machine or piece of equipment that ensures the control of all sources of hazardous energy. District must:

- Develop written equipment-specific procedures.
- Ensure employee usage through periodic reviews.
- Written equipment-specific procedures are not required when all of the following exist:
  - The machine or equipment has no potential for stored or residual or accumulation of energy after shutdown.
  - The machine or equipment has a single energy source that can be readily identified and isolated.
  - The isolation and locking out completely de-energizes and deactivates the machine or equipment.
  - The machine or equipment is isolated from the energy source and locked out during service or maintenance.
  - A single lockout device achieves a locked-out condition.
  - The authorized employee has exclusive control of the lockout device.
  - The servicing or maintenance does not create hazards for other employees.
  - There have not been any accidents involving the unexpected activation or energizing of the piece of equipment or machine during service or maintenance.

If all of the above conditions exist, lock-out/tag-out must still be used, except written equipment-specific procedures are not required.

#### When to Use Lockout and Tag-out

Use lockout whenever you inspect, repair or maintain equipment, machinery, vehicles, heavy equipment that could cause injury by an unexpected start-up of the equipment or release of stored energy. For example:

- During pre/post trip inspection
- When removing guards or other safety devices.
- When moving machinery could come in contact with employees.
- When repairing electrical circuits.
- When clearing jammed mechanisms.
- When cleaning or oiling machinery with moving parts where an employee may get caught within the equipment.



# **Shutdown Preparation**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# Shut down Equipment

Authorized employees will:

- Check with the supervisor if unfamiliar with the operation and shutdown of the equipment.
- Shut down operating equipment using the normal means.
- Follow the correct equipment-specific energy control procedure for each piece of equipment.

#### **Isolate the Equipment**

Authorized employees will:

- Isolate the equipment from its energy sources by using the switch, valve, or other energy-isolating device.
- Isolate all energy sources, including secondary sources.

#### Apply Lock-out/tag-out Devices

Authorized employees will:

- Place a lock on each energy-isolating device (authorized employees may need more than one lock to do this).
- If the authorized employee is not identified by other means, use an identifying approved tag with the following information:
  - a) Name of authorized employee.
  - b) The date.
  - c) A warning of the hazardous condition.

Ensure each worker in the crew attaches his or her personal lock if more than one person is servicing the equipment.

Remember that the individual assigned to a lock has the only key. Workers must have their locks and keys available at the work site.



## **Control Stored Energy**

Release or restrain any stored energy by methods such as blocking, bleeding down, and discharging energy stored in capacitors or other effective methods. If necessary, make equipment safe by disconnecting wiring, removing fuses, uncoupling drive shafts, removing belts, or by using other means. Use danger tags in these cases.

#### Verify Isolation of Equipment

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

#### Do the Work Safely

Each authorized employee will:

- Not do anything that could restart the equipment.
- Not bypass the lockout, for example, by putting in new wiring or piping.

# Shift or Personnel Change

Each authorized employee will ensure:

- Locks and tags remain in place until the job is completed.
- At shift or personnel change, an incoming authorized employee attaches their lock or tag as the outgoing employee removes theirs. **OR**
- An OUT OF SERVICE shop Lock is used during periods of incomplete work or shift change.

## Properly Remove Locks and Tags Following Maintenance Work

Each authorized employee will:

- Inspect the work area and clean up all rags, tools, and materials.
- Replace guards on machines and equipment.
- Conduct a head count and make sure all employees are in a safe position.

#### LOCK-OUT/TAG-OUT PROGRAM

- Notify affected employees that the lock-out or tag-out device is being removed.
- Remove <u>only</u> their own locks or tags. This is the key OSHA required step for preventing injuries.

## Temporary Removal

Workers must follow all of the above procedures before temporarily removing locks and tags to test equipment.

#### **Emergency Removal**

Only a supervisor, in the presence of another employee, can CUT another person's lock(s) and tags. This activity is permitted only under the following conditions: **see page 20 of this program**.

# **Notify Contractors**

Give contractors a copy of this program and hold them responsible for following an equivalent program of their own. Ensure that a contractor's employees will not bypass the protective devices and endanger workers at the facility.

## Group Lock-out/tag-out Procedures

If group lockout/tag-out procedures will be used, each authorized employee must place their own lock and completed tag to each multiple lock hasp device used.

#### Exclusions from Lockout or Tag-out Permitted by OSHA

OSHA permits the exclusion of the following operations from lockout/tag-out procedures:

- Normal production operations including repetitive minor adjustments and maintenance covered under OSHA's machine guarding standards.
- Work on electrical equipment containing a cord and plug as its only energy source, when it is unplugged and being serviced or maintained and the worker has exclusive control over the plug.

# LOCK-OUT/TAG-OUT PROGRAM

#### **Train Employees**

Each authorized employee receives instruction in the following:

- Recognition of hazardous energy source type and magnitude.
- Methods and means for energy isolation and control.
- The purpose, procedures, and use of the energy control procedure.
- Instruction on the prohibition relating to attempts to start or energize locked or tagged out equipment.
- The limitations of tags.
- Methods and means for verifying no hazardous energy are present.

Each affected employee receives instruction in the purpose and use of the energy control procedure, the prohibition of removing locks or tags or attempts to restart equipment that has been locked out or tagged.

Authorized and affected employees are retrained whenever:

- There is a change in job assignment; or
- There is a change in equipment, machinery, or a process that could present new hazards.
- There are reasons to believe there are inadequacies in an employee's knowledge or use of the energy control procedures.

Supervisors of authorized employees will be trained to the level of an authorized employee, as well as trained in supervisor responsibilities for lock-out/tag-out compliance.

# **Conduct Periodic Inspections**

The Program Administrator and/or Supervisor conducts periodic inspections to determine if the authorized personnel are performing adequately. The inspection consists of:

- A review of work practices, the machines that were locked out/tagged out, names of the employees and dates observed.
- Deviations from procedures.
- Corrective actions taken.
- A review with each affected employee on the use and limitations of tags.
- Documentation of inspection.

#### **Specific Information**

Prepared by: Justin Lottig Date: January 2011

Approved by: Joe Whelan Date: January 2011





# Responsibility

Name: Joe Whelan Title: Site Manager

# LOCK-OUT/TAG-OUT PROCEDURES AT FACILITY

Identify the equipment-specific lock-out/tag-out procedures at the facility:

See attached protocols.....

# Requirements for Locks and Tags

Describe the method used to identify locks and tags used <u>exclusively</u> for the lock-out/tag-out program:

Standardized lockout/tag-out devices will be used so that all employees will be able to recognize a locked out piece of equipment. Individual tags which identify the person(s) servicing the equipment will be used. Each person is assigned his or her own lock and it is labeled.

Describe how the identity of the employee applying the lock or tag is indicated on the lock or tag:

The person's name is on the tag.

## Removing Locks

Identify the name(s) and title(s) of person(s) authorized to remove the locks of other employees:

Name: NONE

# LOCK-OUT/TAG-OUT PROGRAM

# **Annual Certification**

Describe the frequency and techniques to be used for the annual certification.

Annually, the Program Administrator will review the lock-out/tag-out program, procedures and best management practices.

# **Training**

Describe the materials used and topics covered for training authorized employees:

Attach the training material to the Safety Attendance Form

Describe the materials used and topics covered for training affected employees:

Attach the training material to the Safety Attendance Form

Describe the materials used and topics covered for training other employees:

Attach the training materials to the Safety Attendance Form

Identify location of training records WGSL Office

#### **DEFINITIONS**

Affected Employee: An employee whose job requires them to operate or use machinery, vehicles, or heavy equipment; on which servicing or maintenance is being performed under lockout or tag-out; or whose job requires him/her to work in an area in which such servicing or maintenance is being performed.

**Authorized Employee:** A person who locks out or tags out machines, vehicles, or heavy equipment; in order to perform servicing or maintenance on that machine or equipment.

**Bleeding:** To slowly empty a liquid or gas from a container or system.

Blocking/Bracing: to fasten, secure, support, or provide with a block

**Energized:** Connected to an energy source or containing residual or stored energy.

**Chock:** The use of a blocking device to prevent vehicles and equipment from moving.

**Double Chocking:** Any combination of – One front wheel and one set of duals, both front wheels, or both sides of rear duals

#### LOCK-OUT/TAG-OUT PROGRAM

**Energy Isolating Device:** A mechanical device that physically prevents the transmission or release of energy such as a manually operated circuit breaker and a disconnect switch. Push buttons and selector switches are not energy isolating devices.

**Energy Source:** Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy.

**Isolate:** To set apart from its energy sources.

**Lockout:** The placement of a lockout device on an energy-isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

**Lockout Device:** A device that utilizes a positive means such as a lock, to hold an energy-isolating device in the safe position and prevent the energizing of a machine or equipment. Included are blank flanges and bolted slip blinds.

*Other Employees:* Those employees who may walk through or visit an area where lockout/tagout is ongoing, but who do not fall under the "affected" category.

*Tag-out*: The placement of a tag-out device on an energy-isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the tag-out device is removed.

*Tag-out Device*: A prominent warning device, such as a tag, which can be securely fastened to an energy-isolating device.

# BELOW ARE SOME GENERAL LO/TO PROCEDURES, YOU ARE RESPONSIBLE FOR REVIEWING THE EQUIPMENT SPECIFIC PROCEDURES FOR EACH PIECE OF EQUIPMENT YOU WORK ON OR OPERATE:

- 1. Set the parking brake.
- 2. Release stored energy.
- 3. Shut the engine off and remove ignition key.
- 4. Place steering wheel cover on steering wheel.
- 5. Turn battery disconnect off and lock/tag-out the disconnect.
- 6. Double chock/block the wheels.
- 7. Use any necessary stands for trucks with bodies or rails in the air:
  - The stands on the front load trucks with tilt bodies are only approved if there is no load in the body. If there is a load, use additional stands.
  - The stands for the rails on the roll-off trucks are only approved if there is no box on the truck. If there is a box on the truck use additional stands.
- 8. Cab-over -- secure cabs forward, if necessary.

#### LOCK-OUT/TAG-OUT PROGRAM

#### TIRE REPLACEMENT

- 1. Set the parking brake.
- 2. Release stored energy.
- 3. Shut off the engine and remove ignition key.
- 4. Place steering wheel cover over steering wheel.
- 5. Turn battery disconnect off and lock/tag-out the disconnect.
- 6. Double chock/block the wheels.
- 7. Use properly rated jack to lift the unit.
- 8. Use properly rated jack stand(s) to support the unit in the raised position.

#### ELECTRICAL SYSTEM REPAIRS

- 1. Turn engine "off" (Exception: Engine may need to be running to check alternator or other dependent system). Place key in pocket.
- 2. Place steering wheel cover on steering wheel.
- 3. Double chock the wheels.

#### PERFORM WORK IN THE BODY OF THE TRUCK

- 1. Set parking brake.
- 2. Release stored energy.
- 3. Shut the engine off and remove ignition key.
- 4. Place steering wheel cover on steering wheel.
- 5. Turn battery disconnect off and lock/tag-out the disconnect.
- 6. Double chock/block the wheels.
- 7. Use any necessary stands or sleeves for trucks with bodies or rails in the air:
  - The stands on the front load trucks with tilt bodies are only approved if there is no load in the body. If there is a load, use additional stands.
  - The stands for the rails on the roll-off trucks are only approved if there is no box on the truck. If there is a box on the truck, use additional stands.
- 8. Be certain that there is no force being exerted by trash on the packer blades.
- 9. If entering through an open tailgate or hopper, be certain they are properly braced with stands.

#### WORK DONE UNDERNEATH THE TRUCK

- 1. Set the parking brake.
- 2. Release stored energy.
- 3. Place steering wheel cover over steering wheel.
- 4. Turn battery disconnect off and lock/tag-out the disconnect.
- 5. Double chock/block the wheels.
- 6. Use any necessary stands for trucks with bodies or rails in the air:
  - The stands on the front load trucks with tilt bodies are only approved if there is no load in the body. If there is a load, use additional stands.
  - The stands for the rails on the roll-off trucks are only approved if there is no box on the truck. If there is a box on the truck, use additional stands.
  - Use hydraulic jacks which may be pinned (to prevent accidents caused by leaking hydraulic jacks) or jack stands, if the truck is going to be off of the ground.

#### LOCK-OUT/TAG-OUT PROGRAM

#### WORK DONE UNDERNEATH THE TAILGATE OR HOPPER

- 1. Set the parking brake.
- 2. Release stored energy.
- 3. Shut engine off and remove ignition key.
- 4. Place steering wheel cover on steering wheel.
- 5. Double chock/block the wheels.
- 6. Use any necessary stands or sleeves for trucks with bodies or rails in the air:
- The stands on the front load trucks with tilt bodies are only approved if there is no load in the body. If there is a load, use additional stands.
- The stands for the rails on the roll-off trucks are only approved if there is no box on the truck. If there is a box on the truck, use additional stands.
- Be certain that tailgate or hopper is properly braced with stands.

#### WORKING ON TRUCK WITH CAB IN RAISED POSITION

- 1. Set the parking brake.
- 2. Release stored energy.
- 3. Shut of the engine and remove ignition key.
- 4. Place steering wheel cover on steering wheel.
- 5. Turn battery disconnect off and lock/tag out the disconnect.
- 6. Double chock/block the wheels.
- 7. Use hydraulic jacks which may be pinned (to prevent accidents caused by leaking hydraulic jacks) or jack stands if the truck is going to be off of the ground.

#### WORKING ON AIR COMPRESSORS

- 1. Turn "off" air compressor at the circuit breaker or remove plug.
- 2. Install a circuit breaker lockout or plug lockout device and lock/tag-out.
- 3. If servicing just the compressor, turn airline valve "off" and place valve lockout device and lock/tag-out valve.
- 4. Drain system (lines and tank) of any pressurized air.
- 5. Test the equipment to be certain there is no electricity present before working on it. Try the switch to be certain that it will not turn on.

# PERFORMING MAINTENANCE, REPAIR, SERVICE OR INSPECTING OF D-8 DOZER

- 1. Set the parking brake.
- 2. Lower blade to floor.
- 3. Neutralize all hydraulics.
- 4. Shut off the engine and remove the ignition key.
- 5. Turn battery disconnect off and lock/tag out the disconnect.
- 6. Place warning tag on equipment.
- 7. Block the tracks.

#### LOCK-OUT/TAG-OUT PROGRAM

# **MECHANICS**

Remember that each person working on a piece of equipment must have their own individual lock that no one else can open, on that piece of equipment. Use a multiple lock hasp if more than one person works on the vehicle.

# WHEN ANY PART OF A DRIVER'S BODY IS GOING TO BE UNDERNEATH THE RAISED RAILS ON A ROLL-OFF TRUCK

- 1. Set the parking brake.
- 2. Release stored energy.
- 3. Turn the engine off and remove ignition key.
- 4. Place steering wheel cover on steering wheel.
- 5. Turn battery disconnect off and lock/tag-out the disconnect.
- 6. Chock/block the wheels.
- 7. Use the body stands attached to the body:
  The stands for the rails on the roll-off trucks are only approved if there is no box on the truck.
  If there is a box on the truck use additional stands.

#### SWITCHING OUT A COMPACTOR BOX

- 1. Disconnect and lockout and tag-out the power to the compactor before the ratchets are loosened. (Turn power off, Disconnect hydraulic hoses or loosen turn buckles)
- 2. Leave the compactors power supply Locked out and tagged out until the box is returned and secured. Turn power back on.

# DISLODGING CARDBOARD OR OTHER DEBRIS FROM ROLL-OFF BOX WHILE THE BOX IS ATTACHED TO THE VEHICLE IN ANY WAY

- 1. Set the parking brake.
- 2. Release stored energy.
- 3. Turn off the engine and remove ignition key.
- 4. Place steering wheel cover on steering wheel.
- 5. Turn battery disconnect off and lock / tag out the disconnect.
- 6. Chock/block wheels.

#### CRAWLING UNDERNEATH A TRUCK FOR ANY REASON

- 1. Set the parking brake.
- 2. Release stored energy.
- 3. Turn off the engine and remove the ignition key.
- 4. Place steering wheel cover on steering wheel.
- 5. Turn battery disconnect off and lock/tag-out the disconnect.
- 6. Chock/block the wheels.

### LOCK-OUT/TAG-OUT PROGRAM

#### CLEANING OUT FROM BEHIND THE PUSH BLADE

- 1. Set the parking brake.
- 2. Bring blade forward (towards cab) to relieve any pressure caused by compacted waste.
- 3. Turn the engine off and remove ignition key.
- 4. Place steering wheel cover on steering wheel.
- 5. Turn battery disconnect off and lock/tag-out the disconnect.
- 6. Chock/block the wheels.

#### CLEANING OUT THE TOP OF THE HOPPER

- 1. Set the parking brake.
- 2. Released stored energy.
- 3. Turn the engine off and remove ignition key.
- 4. Turn battery disconnect off and lock/tag-out the disconnect.
- 5. Chock/block the wheels.
- 6. Be certain that the blade is completely in the down position so that there is no stored energy in the blade should a hydraulic hose break.

# ALL DRIVERS: PARK OVER LEVEL SURFACE - PULL PARKING BRAKE WHEN PARKING ON A GRADE, CHOCK WHEELS

#### SWEEPING OUT TRAILERS AT THE LANDFILL

- 1. Set the parking brake.
- 2. Turn the engine off and remove ignition key.
- 3. Place steering wheel cover on steering wheel.
- 4. Turn battery disconnect off and lock/tag-out the disconnect.
- 5. Chock/block wheels.

## CRAWLING UNDERNEATH DETACHED TRAILERS OR UNLOADING TRAILERS

- 1. Chock at least 2 wheels
- 2. Place kingpin jack under trailer (do not rely on dolly legs to support trailer).

#### CRAWLING UNDERNEATH A TRUCK FOR ANY REASON

- 1. Set the parking brake.
- 2. Release stored energy.
- 3. Turn off the engine and remove the ignition key.
- 4. Place steering wheel cover on steering wheel.
- 5. Turn battery disconnect off and lock/tag-out the disconnect.
- 6. Chock/block the wheels.

### LOCK-OUT/TAG-OUT PROGRAM

# **ALL OPERATORS: PARK VEHICLE ON LEVEL SURFACE**

# ANY WORK BEING DONE ON OR AROUND ONE OF THESE VEHICLES WHEN THE FORKS OR BUCKET IS IN THE AIR

- 1. Set the parking brake.
- 2. Turn the engine off and remove ignition key.
- 3. Turn battery disconnect off and lock/tag-out the disconnect.
- 4. Put stands underneath the bucket or forks to prevent it from falling to the ground should a hydraulic hose break.

# CRAWLING UNDERNEATH EQUIPMENT FOR ANY REASON

- 1. Set the parking brake.
- 2. Release stored energy.
- 3. Turn off the engine and remove the ignition key.
- 4. Place steering wheel cover on steering wheel.
- 5. Turn battery disconnect off and lock/tag-out the disconnect.
- 6. Chock/block the wheels.

#### WHEN BALER IS NOT IN USE

- 1. Lockout and tag-out the power supply in the electrical breaker room.
- 2. Try the on/off switch on the baler to be certain that the power is off.
- 3. Remove the key from the baler put key in pocket.

#### WHEN BALER BECOMES JAMMED AND YOU MUST ENTER BALER

- 1. Lockout and tag-out the power supply in the electrical breaker room.
- 2. Try the on/off switch on the baler to be certain that the power is off.
- 3. Remove the key from the baler put key in pocket.

#### WHEN NORMAL MAINTENANCE MUST BE PERFORMED ON BALER

- 1. Lockout and tag-out the power supply in the electrical breaker room.
- 2. Try the on/off switch on the baler to be certain that the power is off.
- 3. Remove the key from the baler put key in pocket.



# AUTHORIZED EMPLOYEES INDEPENDENT AND GROUP LOCK-OUT/TAG-OUT

1.	Name: Title: Area:			
2.	Name: Title: Area:			
3.	Name: Title: Area:			
4.	Name: Title: Area:			
5.	Name: Title: Area:			
6.	Name: Title: Area:			
7.	Name: Title: Area:			
8.	Name: Title: Area:			
9.	Name: Title: Area:			
10.	Name: Title: Area:			
11.	Name: Title:			

Area:



12.	Name: Title:
	Area:
13.	Name:
	Title: Area:
14.	Name:
	Title: Area:
1.5	
15.	Name: Title:
	Area:
16.	Name:
	Title:
	Area:
17.	Name:
	Title: Area:
10	
18.	Name: Title:
	Area:
19.	Name:
	Title:
	Area:
20.	Name: Title:
	Area:
21.	Name:
21.	Title:
	Area:
22.	Name:
	Title: Area:
23.	Name:

Title:





# ANNUAL OBSERVATION FORM

# ANNUAL ENERGY CONTROL (LOCK-OUT/TAG-OUT) PROCEDURE REVIEW/OBSERVATION

ted Name		Signature	
I certify that this inspec	tion was performed a	s described above.	
ANY DEFICIENCIES	NOTED - REQUIE	RE IMMEDIATE RETRAINING	
Machine/equipment on	which energy control	l was being utilized:	
_		ure reviewed:	
1 / 1	5 · · 67 · · · · · · · · · · · · · · · ·	edure:	

## EMERGENCY REMOVAL OF LOCKS/TAGS



#### EMERGENCY REMOVAL OF LOCKS/TAGS

There are occasions that require a lock/tag to be removed from equipment in the absence of the employee that placed that particular lock/tag. The emergency lock/tag removal procedure will be performed by a Manager/Supervisor for the following reasons:

- 1. Employee calls in sick.
- 2. The equipment needs to be repaired immediately.
- 3. Employee sustains an injury and can't come to work.
- 4. Suspension/termination from work.
- 5. Employee is disqualified from his present duties.
- 6. For any other reason that the Manager/Supervisor deems necessary.

In order for a lock/tag to be removed from an equipment when the employee that placed it is not present, the following criteria **MUST** be fully met:

- 1. Only a Manager or a Supervisor with the consent of his Manager may remove the lock/tag.
- 2. The employee that placed the lock/tag **MUST** be notified of this action prior to the removal if possible; otherwise an attempt has to be made to contact the employee in the presence of a witness and documented.
- 3. A duplicate key or a master key may not be used.
- 4. A lock maybe removed only by cutting it. A new lock(s) **SHALL** be issued when the affected employee returns to duty.

The procedures stated above will ensure that the Waste Management employees are fully protected from accidental start up while performing maintenance duties.

# WV-

#### **EMERGENCY REMOVAL FORM**

## **EMERGENCY REMOVAL FORM**

In the case where it is necessary to remove an employee's lock-out/tag-out devise from a piece of equipment or machinery, the following procedure <u>MUST</u> be followed.

Only a supervisor, in the presence of another employee, can remove another person's locks and tags. This activity is permitted only under the following conditions:

- d) Supervisor must verify the employee who put the lock or tag on the equipment is not at the facility.
- e) The supervisor must inform the employee or make 2-3 attempts by phone that their lock is going to be removed before the employee resumes work at the facility.
- f) The supervisor must prepare a report explaining why the protective device was removed, when and where it occurred, and how the affected employee was informed prior to starting work.
- The lock must be removed by way of cutting. At no time is a spare key allowed by any other person other than the person assigned the lock.
- The cut lock is to be placed into a baggy or envelope including documentation of emergency removal attempt and procedures.
- The employee must receive a new lock and key upon returning to work.

EMPLOYEE CONTACT—1 <sup>st</sup> ATTEMPT			
Time & Date	Phone # Called		
Signature of manager/supervisor	Witness signature		
EMPLOYEE CONTACT—2 <sup>nd</sup> ATTEMPT			
Time & Date	Phone # Called		
Signature of manager/supervisor	Witness signature		
CUTTING LOCK			
Date Removed	Time Removed		
Signature of manager/supervisor cutting lock	Witness signature		
District/Facility Manager Signature	Date		





LOCK-OUT/TAG-OUT PROTOCOLS	ATTACHMENT	DEPARTMENT
Pre/Post Trip Inspection (Commercial Vehicles)	1	Operation
Working on Truck with Cab in the Raised Position	2	Maintenance
Working on Rear of a Rear Loader with the Tailgate in the	3	Maintenance
Raised Position		
Working Under the Raised Tilt Frame of a Roll-Off Truck	4	Maintenance
or Trailer		
Tire Replacement	5	Maintenance
Changing Hydraulic or Air Lines	6	Maintenance
Working Inside the Body of a Rear Loader	7	Maintenance
Performing Various Functions Working Under the	8	Maintenance
Vehicle		
Maintenance, Repairs, or Servicing Recycle Trucks with	9	Operation
Bins or Tailgate in the Raised Position		-
Performing Maintenance, Repairs, or Servicing of Trailers	10	Maintenance
(Disconnected From Tractor)		
Performing Maintenance, Repairs, or Servicing of	11	Maintenance
Heavy Equipment with Hydraulic Attachments in the		
Raised Position		
Performing Maintenance, Repairs, or Servicing on 910,	12	Maintenance
936,966, 980, 988 or any other Loaders with the Bucket		
in the Lowered Position		
Performing Maintenance, Repairs, or Servicing on 910,	13	Maintenance
936, 966, 980, 988 or any other Loaders with the Bucket		
in the Raised Position		
Performing Maintenance, Repairs, or Servicing of D-8	14	Maintenance
Dozer		
Performing Maintenance, Repairs, or Servicing of D-8	15	Maintenance
Dozer with Blade in the Raised Position		
Performing Maintenance, Repairs, or Servicing of 245	16	Maintenance
Excavator		
Performing Maintenance, Repairs, or Servicing of	17	Maintenance
Heavy Equipment with Hydraulic Attachments in		
the Lowered Position		
Performing Maintenance, Repairs, or Servicing of	18	Maintenance
HI/LO Forklift with Forks in the Lowered Position		
Performing Maintenance, Repairs, or Servicing of	19	Maintenance
HI/LO Forklift with Forks in the Raised Position		
Performing Maintenance, Repairs, or Servicing of Street	20	Maintenance
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## Pre/Post Trip Inspection (Commercial Vehicles)

#### **POTENTIAL ENERGY SOURCES:**

•	air pressure	•	chemical reaction	•	electrical	•	flammability
•	heat	•	hydraulic pressure	•	mechanical	•	gravity

#### **LOCKOUT METHOD(S):**

battery disconnect
 remove air fitting/nipple
 circuit lockout
 handle/valve lockout
 plug lockout

#### TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Close Tag
 Do Not Open Tag
 Do Not Operate Tag
 Do Not Close Tag
 Steering Wheel Cover (Do Not Operate or Start)

#### **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Release stored energy.
- 3. Shut off the engine and remove ignition key.
- 4. Place steering wheel cover on steering wheel.
- 5. Chock wheels
- 6. Turn battery disconnect off and lock/tag-out the disconnect.

#### **VERIFY ISOLATION OF EQUIPMENT:**

#### Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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#### WORKING ON TRUCK WITH CAB IN THE RAISED POSITION

#### **POTENTIAL ENERGY SOURCES:**

air pressure
chemical reaction
electrical
flammability
mechanical
gravity

#### LOCKOUT METHOD(S):

battery disconnect
 remove air fitting/nipple
 circuit lockout
 handle/valve lockout
 plug lockout

#### TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Open Tag
 Do Not Open Tag
 Steering Wheel Cover (Do Not Operate or Start)

#### SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Release stored energy.
- 3. Shut off the engine and remove ignition key.
- 4. Place steering wheel cover on steering wheel.
- 5. Turn battery disconnect off and lock/tag-out the disconnect.
- 6. Double chock/block the wheels.
- 7. Raise the cab to its full-extended position or utilize the safety legs.

#### **VERIFY ISOLATION OF EQUIPMENT:**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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## WORKING ON REAR OF A REAR LOADER WITH THE TAILGATE IN THE RAISED POSITION

#### **POTENTIAL ENERGY SOURCES:**

• air pressure •

• chemical reaction

electrical

flammability

heat

• hydraulic pressure

mechanical

gravity

#### **LOCKOUT METHOD(S):**

battery disconnect

circuit lockout

handle/valve lockout

• remove air fitting/nipple

wheel chock/blocks

• plug lockout

#### TAG-OUT METHOD(S):

Do Not Start Tag

• Do Not Energize Tag

• Do Not Open Tag

• Do Not Operate Tag

• Do Not Close Tag

• Steering Wheel Cover (Do Not Operate or Start)

#### SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Release stored energy.
- 3. Shut engine off and remove ignition key.
- 4. Place steering wheel cover on steering wheel.
- 5. Turn battery disconnect off and lock/tag-out the disconnect.
- 6. Double chock/block the wheels.
- 7. Support tailgate with an appropriately rated chain fall <u>or;</u> install cylinder safety lock (sleeve) <u>or;</u> use tailgate stand with adequate base <u>or;</u> use the tailgate props supplied by the manufacturer.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date:	Signature:	



#### WORKING UNDER THE RAISED TILT FRAME OF A ROLL OFF TRUCK OR TRAILER.

#### **POTENTIAL ENERGY SOURCES:**

air pressure
chemical reaction
electrical
flammability
heat
hydraulic pressure
mechanical
gravity

#### LOCKOUT METHOD(S):

battery disconnect
 remove air fitting/nipple
 circuit lockout
 handle/valve lockout
 plug lockout
 lock tilt frame safety leg

#### TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Close Tag
 Do Not Open Tag
 Do Not Open Tag
 Steering Wheel Cover (Do Not Operate or Start)

#### **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Release stored energy.
- 3. Shut of the engine and remove ignition key.
- 4. Place steering wheel cover on steering wheel.
- 5. Turn battery disconnect off and lock/tag-out the disconnect.
- 6. Double chock/block the wheels.
- 7. Lock tilt frame safety leg into place and place a 6" X 6" wood block between the tilt frame and the chassis; or, use the safety leg supplied by the manufacturer and de-energize the hydraulic cylinders.

#### **VERIFY ISOLATION OF EQUIPMENT:**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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#### TIRE REPLACEMENT

#### **POTENTIAL ENERGY SOURCES:**

air pressure
chemical reaction
electrical
flammability
heat
hydraulic pressure
mechanical
gravity

#### LOCKOUT METHOD(S):

battery disconnect
 circuit lockout
 handle/valve lockout

remove air fitting/nipple
 wheel chock/blocks
 plug lockout

#### TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Open Tag

Do Not Operate Tag
 Do Not Close Tag
 Steering Wheel Cover (Do Not Operate or Start)

#### **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Release stored energy.
- 3. Shut off the engine and remove ignition key.
- 4. Place steering wheel cover on steering wheel.
- 5. Turn battery disconnect off and lock/tag-out the disconnect.
- 6. Double chock/block the wheels.
- 7. Use properly rated jack to lift the unit.
- 8. Use properly rated jack stand to support the unit in the raised position.

### <u>VERIFY ISOLATION OF EQUIPMENT</u>

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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#### CHANGING HYDRAULIC OR AIR LINES

#### **POTENTIAL ENERGY SOURCES:**

pneumatic
 chemical reaction
 electrical
 flammability

heat
 hydraulic pressure
 mechanical

#### **LOCKOUT METHOD(S):**

battery disconnect
 circuit lockout
 handle/valve lockout

remove air fitting/nipple
 wheel chock/blocks
 plug lockout

#### TAG-OUT METHOD(S):

• Do Not Start Tag • Do Not Energize Tag • Do Not Open Tag

Do Not Operate Tag
 Do Not Close Tag
 Steering Wheel Cover (Do Not Operate or Start)

#### **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Release stored energy.
- 3. Shut off engine and remove ignition key.
- 4. Place steering wheel cover on steering wheel.
- 5. Turn battery disconnect off and lock/tag-out the disconnect.
- 6. Double chock/block the wheels.
- 7. Lock tilt frame safety leg into place and place a 6" X 6" wood block between the tilt frame and the chassis, or; use the safety leg supplied by the manufacturer and de-energize the hydraulic cylinders, or; de-energize the air pressure at its source.

#### **VERIFY ISOLATION OF EQUIPMENT**

#### Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date:	Signature	
Date.	Signature.	



#### WORKING INSIDE THE BODY OF A REAR LOADER

#### **POTENTIAL ENERGY SOURCES:**

air pressure
chemical reaction
electrical
flammability
mechanical
gravity

#### LOCK<u>OUT METHOD(S):</u>

battery disconnect
 circuit lockout
 handle/valve lockout

remove air fitting/nipple
 wheel chock/blocks
 plug lockout

#### TAG-OUT METHOD(S):

• Do Not Start Tag • Do Not Energize Tag • Do Not Open Tag

• Do Not Operate Tag • Do Not Close Tag • Steering Wheel Cover (Do Not Operate or Start)

#### **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Release stored energy.
- 3. Shut off the engine and remove the ignition key.
- 4. Place steering wheel cover on steering wheel.
- 5. Turn battery disconnect off and lock/tag-out the disconnect.
- 6. Double chock/block the wheels.

#### <u>VERIFY ISOLATION OF EQUIPMENT</u>

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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Date:	Signature:



#### PERFORMING VARIOUS FUNCTIONS WORKING UNDER THE VEHICLE

#### POTENTIAL ENERGY SOURCES:

air pressure

• chemical reaction

• electrical

flammability

• heat

• hydraulic pressure

mechanical

gravity

#### LOCKOUT METHOD(S):

• battery disconnect

• circuit lockout

• handle/valve lockout

• remove air fitting/nipple

• wheel chock/blocks

· plug lockout

#### TAG-OUT METHOD(S):

• Do Not Start Tag

• Do Not Energize Tag

• Do Not Open Tag

• Do Not Operate Tag

◆ Do Not Close Tag

• Steering Wheel Cover (Do Not Operate or Start)

#### SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Release stored energy.
- 3. Shut off the engine and remove ignition key.
- 4. Place steering wheel cover on steering wheel.
- 5. Turn battery disconnect off and lock/tag-out the disconnect.
- 6. Double chock/block the wheels.

#### **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

#### PROCEDURES TO PLACE VEHICLE BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date:	Signature:



PERFORMING MAINTENANCE, REPAIRS, OR SERVICING RECYCLE TRUCKS WITH BINS OR TAILGATE IN THE RAISED POSITION

#### POTENTIAL ENERGY SOURCES:

air pressure

• chemical reaction

electrical

flammability

• heat

• hydraulic pressure

• mechanical

gravity

#### **LOCKOUT METHOD(S):**

• battery disconnect

circuit lockout

• handle/valve lockout

• remove air fitting/nipple

wheel chock/blocks

• plug lockout

#### TAG-OUT METHOD(S):

• Do Not Start Tag

• Do Not Energize Tag

• Do Not Open Tag

• Do Not Operate Tag

• Do Not Close Tag

• Steering Wheel Cover (Do Not Operate or Start)

#### SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Release stored energy.
- 3. Shut off engine and remove ignition key.
- 4. Place steering wheel cover on steering wheel.
- 5. Turn battery disconnect off and lock/tag-out the disconnect.
- 6. Double chock/block the wheels.
- 7. Support bin or tailgate with: a) Appropriately rated chain fall, or; b) Install cylinder safety lock (sleeve), or; c) Use tailgate stand with adequate base, or; d) Block with 6 X 6 wood blocks, or; e) Use the safety pins provided by the manufacturer.
- \*\*UNDER NO CIRCUMSTANCES ARE DRIVERS/HELPERS ALLOWED TO GO UNDER THE SIDE BINS.

## **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date:	 Signature:



# PERFORMING MAINTENANCE, REPAIRS, OR SERVICING OF TRAILERS (Disconnected from Tractor)

#### **POTENTIAL ENERGY SOURCES:**

air pressure

• chemical reaction

electrical

flammability

• heat

• hydraulic pressure

mechanical

gravity

#### **LOCKOUT METHOD(S):**

• battery disconnect

• circuit lockout

· handle/valve lockout

• remove air fitting/nipple

wheel chock/blocks

• plug lockout

#### TAG-OUT METHOD(S):

• Do Not Start Tag

• Do Not Energize Tag

• Do Not Open Tag

• Do Not Operate Tag

Do Not Close Tag

• Steering Wheel Cover (Do Not Operate or Start)

#### SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

## SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Double chock/block the wheels.
- 2. Place warning tag on equipment.
- 3. Support with additional jack stands.

#### **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

#### PROCEDURES TO PLACE TRAILERS BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date:	Signature:
Date:	Signature:



# PERFORMING MAINTENANCE, REPAIRS, OR SERVICING OF ANY EQUIPMENT WITH HYDRAULIC ATTACHMENTS IN THE RAISED POSITION

#### **POTENTIAL ENERGY SOURCES:**

air pressure
chemical reaction
electrical
flammability
mechanical
gravity

#### **LOCKOUT METHOD(S):**

battery disconnect
 remove air fitting/nipple
 circuit lockout
 handle/valve lockout
 plug lockout

### TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Close Tag
 Do Not Operate Tag
 Do Not Close Tag
 Do Not Operate Operate

#### **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Release stored energy.
- 3. Shut the engine off and remove ignition key.
- 4. Place warning tag on equipment.
- 5. Turn battery disconnect off and lock/tag-out the disconnect.
- 6. Double chock or block wheels.
- 7. Support attachment with; a) appropriately rated chain fall, or; b) install cylinder safety lock (sleeve), or; c) safety stands/wood blocks.

#### **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

#### PROCEDURES TO PLACE HEAVY EQUIPMENT BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date: Signature:	
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PERFORMING MAINTENANCE, REPAIRS, OR SERVICING ON 910, 936, 966, 980, 988, OR ANY WHEEL LOADERS WITH THE BUCKET IN THE LOWERED POSITION

#### **POTENTIAL ENERGY SOURCES:**

• air pressure • cher

• chemical reaction

• electrical

flammability

• heat

• hydraulic pressure

• mechanical

gravity

## **LOCKOUT METHOD(S):**

• battery disconnect

circuit lockout

• handle/valve lockout

• remove air fitting/nipple

wheel chock/blocks

· plug lockout

#### TAG-OUT METHOD(S):

• Do Not Start Tag

• Do Not Energize Tag

• Do Not Open Tag

• Do Not Operate Tag

• Do Not Close Tag

• Steering Wheel Cover (Do Not Operate or Start)

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Lower bucket to the floor.
- 3. Release stored energy.
- 4. Turn the engine off and remove ignition key.
- 5. Place steering wheel cover on steering wheel.
- 6. Turn battery disconnect off and lock/tag-out the disconnect.
- 7. Double chock or block wheels.

# <u>VERIFY ISOLATION OF EQUIPMENT</u>

#### Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

# PROCEDURES TO PLACE 910,936,966,980,988 LOADERS BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date: Signature:	
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## PERFORMING MAINTENANCE, REPAIRS, OR SERVICING ON 910, 936, 966, 980, 988, OR ANY WHEEL LOADERS WITH THE BUCKET IN THE RAISED POSITION

#### POTENTIAL ENERGY SOURCES:

• chemical reaction electrical flammability air pressure • hydraulic pressure heat mechanical gravity

#### LOCKOUT METHOD(S):

• battery disconnect circuit lockout • handle/valve lockout plug lockout

• remove air fitting/nipple • wheel chock/blocks

## TAG-OUT METHOD(S):

• Do Not Start Tag • Do Not Energize Tag • Do Not Open Tag

• Do Not Operate Tag • Do Not Close Tag • Steering Wheel Cover (Do Not Operate or Start)

#### SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Raise bucket to the desired position, put stand under bucket and lower bucket to the stand or use overhead crane to support the bucket.
- 3. Install cylinder safety lock (sleeve).
- 4. If necessary, de-energize all hydraulics.
- 5. Turn the engine off and remove ignition key.
- 6. Turn battery disconnect off and lock/tag-out the disconnect.
- 7. Place steering wheel cover on steering wheel.
- 8. Double chock or block the wheels.

#### **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

### PROCEDURES TO PLACE 910,936,966,980,988 LOADERS BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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#### PERFORMING MAINTENANCE, REPAIR OR SERVICING OF D-8 DOZER

#### POTENTIAL ENERGY SOURCES:

• air pressure

• chemical reaction

• electrical

flammability

• heat

• hydraulic pressure

mechanical

gravity

### LOCKOUT METHOD(S):

• battery disconnect

• circuit lockout

• handle/valve lockout

• remove air fitting/nipple

wheel chock/blocks

• plug lockout

#### TAG-OUT METHOD(S):

• Do Not Start Tag

• Do Not Energize Tag

Do Not Open Tag

• Do Not Operate Tag

• Do Not Close Tag

• Steering Wheel Cover (Do Not Operate or Start)

#### SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set parking brake.
- 2. Lower the blade to the floor.
- 3. Neutralize all hydraulics.
- 4. Shut off the engine and remove ignition key.
- 5. Turn battery disconnect off and lock/tag-out the disconnect.
- 6. Place warning tag on equipment.
- 7. Block the tracks.

#### **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

#### PROCEDURES TO PLACE D-8 DOZER BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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# PERFORMING MAINTENANCE, REPAIR OR SERVICING OF D-8 DOZER WITH THE BLADE IN THE RAISED POSITION.

#### POTENTIAL ENERGY SOURCES:

• air pressure • chemical reaction • electrical • flammability

heat
 hydraulic pressure
 mechanical
 gravity

# **LOCKOUT METHOD(S):**

battery disconnect
 circuit lockout
 handle/valve lockout

remove air fitting/nipple
 wheel chock/blocks
 plug lockout

# TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Open Tag

Do Not Operate Tag
 Do Not Close Tag
 Steering Wheel Cover (Do Not Operate or Start)

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Raise blade to the desired height.
- 3. Block up the arms with jack stands or with wood blocks.
- 4. Lower the arms.
- 5. If necessary, neutralize the hydraulics.
- 6. Shut the engine off and remove ignition key.
- 7. Place out of service tag on equipment.
- 8. Turn battery disconnect off and lock/tag-out the disconnect.
- 9. Block the tracks.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

# PROCEDURES TO PLACE D-8 DOZER BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 3. Notify affected employees that the lock-out/tag-out is being removed.
- 4. Remove lockout devices along with their own locks and tags.

Date:	Signature:	
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#### PERFORMING MAINTENANCE, REPAIR OR SERVICING OF 245 EXCAVATOR

#### POTENTIAL ENERGY SOURCES:

air pressure

• chemical reaction

• electrical

• flammability

heat

• hydraulic pressure

• mechanical

gravity

# **LOCKOUT METHOD(S):**

· battery disconnect

circuit lockout

handle/valve lockout

• remove air fitting/nipple

wheel chock/blocks

• plug lockout

#### TAG-OUT METHOD(S):

• Do Not Start Tag

• Do Not Energize Tag

• Do Not Open Tag

• Do Not Operate Tag

Do Not Close Tag

• Steering Wheel Cover (Do Not Operate or Start)

### SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Lower boom to the ground.
- 3. Put hydraulic control level to the "off" position (down).
- 4. De-energize all hydraulics
- 5. Shut the engine off and remove the ignition key.
- 6. Turn battery disconnect off and lock/tag-out the disconnect.
- 7. Place warning tag on equipment.
- 8. Block tracks.

# <u>VERIFY ISOLATION OF EQUIPMENT</u>

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

# PROCEDURES TO PLACE EXCAVATOR BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 3. Notify affected employees that the lock-out/tag-out is being removed.
- 4. Remove lockout devices along with their own locks and tags.

Date:	Signature:



# PERFORMING MAINTENANCE, REPAIRS, OR SERVICING OF HEAVY EQUIPMENT WITH HYDRAULIC ATTACHMENTS IN THE LOWERED POSITION

# POTENTIAL ENERGY SOURCES:

air pressure

• chemical reaction

electrical

flammability

heat

• hydraulic pressure

mechanical

gravity

#### **LOCKOUT METHOD(S):**

• battery disconnect

• circuit lockout

handle/valve lockout

• remove air fitting/nipple

• wheel chock/blocks

• plug lockout

#### TAG-OUT METHOD(S):

• Do Not Start Tag

Do Not Energize Tag

• Do Not Open Tag

• Do Not Operate Tag

• Do Not Close Tag

• Steering Wheel Cover (Do Not Operate or Start)

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Lower boom, or bucket to the ground.
- 3. De-energize any stored pressure.
- 4. Shut down the engine and remove keys from the ignition.
- 5. Turn battery disconnect off and lock/tag-out the disconnect.
- 6. Place warning tag on equipment.
- 7. Double chock/block wheels/tracks.

# **VERIFY ISOLATION OF EQUIPMENT**

- Authorized employees will:
- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

# PROCEDURES TO PLACE HEAVY EQUIPMENT BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date:	Signature:	
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# PERFORMING MAINTENANCE, REPAIR OR SERVICING OF HI/LO FORKLIFT WITH FORKS IN THE LOWERED POSITION.

# POTENTIAL ENERGY SOURCES:

air pressure
chemical reaction
electrical
flammability
gravity

#### **LOCKOUT METHOD(S):**

battery disconnect
 remove air fitting/nipple
 circuit lockout
 handle/valve lockout
 plug lockout

# TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Open Tag
 Do Not Open Tag
 Steering Wheel Cover (Do Not Operate or Start)

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Lower forks to the floor.
- 2. De-energize all hydraulics.
- 3. Shut down the engine and remove ignition key.
- 4. Place steering wheel cover on steering wheel.
- 5. Turn battery disconnect off and lock/tag-out the disconnect.
- 6. Double chock/block the wheels.
- 7. Shut off propane valve at the tank (if equipped).

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

# PROCEDURES TO PLACE HI/LO FORKLIFT BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date:	Signature:	
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# PERFORMING MAINTENANCE, REPAIR OR SERVICING OF HI/LO FORKLIFT WITH FORKS IN THE RAISED POSITION.

# POTENTIAL ENERGY SOURCES:

air pressure
chemical reaction
electrical
flammability
mechanical
gravity

# **LOCKOUT METHOD(S):**

battery disconnect
circuit lockout
handle/valve lockout
remove air fitting/nipple
wheel chock/blocks
plug lockout

#### TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Operate Tag
 Do Not Close Tag
 Steering Wheel Cover (Do Not Operate or Start)

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Raise forks to the desired height.
- 3. Support forks with an appropriately rated chain fall, or appropriately rated jack stands.
- 4. De-energize the hydraulics.
- 5. Shut down the engine and remove the ignition key.
- 6. Place steering wheel cover on steering wheel.
- 7. Turn battery disconnect off and lock/tag-out the disconnect.
- 8. Double chock/block the wheels.
- 9. Shut off propane valve at the tank (if equipped).

# <u>VERIFY ISOLATION OF EQUIPMENT</u>

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

## PROCEDURES TO PLACE HI/LO FORKLIFT BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date	S	Signature			



#### PERFORMING MAINTENANCE, REPAIR OR SERVICING OF STREET SWEEPER.

#### **POTENTIAL ENERGY SOURCES:**

- air pressure
- chemical reaction
- electrical
- flammability

- heat
- hydraulic pressure
- mechanical
- gravity

### LOCKOUT METHOD(S):

- battery disconnect
- circuit lockout
- handle/valve lockout

- remove air fitting/nipple
- wheel chock/blocks
- plug lockout

### TAG-OUT METHOD(S):

- Do Not Start Tag
- Do Not Energize Tag
- Do Not Open Tag

- Do Not Operate Tag
- Do Not Close Tag
- Steering Wheel Cover (Do Not Operate or Start)

#### **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set parking brake.
- 3. Release stored energy.
- 4. Shut down the engine and remove ignition key.
- 5. Place steering wheel cover on steering wheel.
- 6. Turn battery disconnect off and lock/tag-out the disconnect.
- 7. Double chock or block the wheels.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

# PROCEDURES TO PLACE STREET SWEEPER IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date:	Sig	nature:	



PERFORMING MAINTENANCE, REPAIR OR SERVICING OF STREET SWEEPER WITH THE HOPPER IN THE RAISED (DUMP) POSITION.

# POTENTIAL ENERGY SOURCES:

air pressure

• chemical reaction

electrical

flammability

heat

• hydraulic pressure

mechanical

gravity

#### **LOCKOUT METHOD(S):**

battery disconnect

• circuit lockout

• handle/valve lockout

• remove air fitting/nipple

wheel chock/blocks

plug lockout

#### TAG-OUT METHOD(S):

• Do Not Start Tag

• Do Not Energize Tag

Do Not Open Tag

• Do Not Operate Tag

• Do Not Close Tag

• Steering Wheel Cover (Do Not Operate or Start)

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set parking brake.
- 2. Raise hopper to the dump position.
- 3. Install safety legs and lower to its resting position.
- 4. Release stored energy.
- 5. Turn of the engine and remove ignition key.
- 6. Place steering wheel cover on steering wheel.
- 7. Turn battery disconnect off and lock/tag-out the disconnect.
- 8. Double chock or block the wheels.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

#### PROCEDURES TO PLACE STREET SWEEPER IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date:	Sig	gnature:	



#### PERFORMING MAINTENANCE, REPAIR OR SERVICING OF MAN LIFTS

#### **POTENTIAL ENERGY SOURCES:**

air pressure
 chemical reaction
 leectrical
 flammability
 mechanical
 gravity

# **LOCKOUT METHOD(S):**

battery disconnect
 remove air fitting/nipple
 circuit lockout
 handle/valve lockout
 plug lockout

# TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Operate Tag
 Do Not Close Tag
 Steering Wheel Cover (Do Not Operate or Start)

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Chock/block/block wheels.
- 2. Extend boom and lower to the ground.
- 3. If necessary, release stored energy.
- 4. Shut down and remove key.
- 5. Turn battery disconnect off and lock/tag-out the disconnect.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

#### PROCEDURES TO PLACE MAN LIFTS BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date:		Signature:	
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# PERFORMING MAINTENANCE, REPAIR OR SERVICING ON DUMP BODY TRAILERS WITH THE BOX IN THE LOWERED POSITION.

(Disconnected from Tractor)

POTENTIAL ENERO	GY SOURCES:
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air pressure
 chemical reaction
 electrical
 flammability

heat
 hydraulic pressure
 mechanical
 gravity

#### **LOCKOUT METHOD(S):**

battery disconnect
 circuit lockout
 handle/valve lockout

remove air fitting/nipple
 wheel chock/blocks
 plug lockout

# TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Open Tag

• Do Not Operate Tag • Do Not Close Tag Steering Wheel Cover (Do Not Operate or Start)

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

## SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Double chock/block wheels.
- 2. Install safety stand under fifth wheel plate.
- 3. Place warning tag on equipment.

# **VERIFY ISOLATION OF EQUIPMENT**

# Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

## PROCEDURES TO PLACE DUMP BODY TRAILERS BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date:	Signature:	



# PERFORMING MAINTENANCE, REPAIR OR SERVICING OF DUMP BODY TRAILERS WITH THE BOX IN THE RAISED (DUMP) POSITION (EMPTY ONLY)

#### POTENTIAL ENERGY SOURCES:

air pressure
chemical reaction
electrical
flammability
mechanical
gravity

# **LOCKOUT METHOD(S):**

battery disconnect
 circuit lockout
 handle/valve lockout

remove air fitting/nipple
 wheel chock/blocks
 plug lockout

# TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Open Tag
 Do Not Open Tag
 Steering Wheel Cover (Do Not Operate or Start)

#### SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Raise box to the desired height.
- 3. Install appropriately rated stands under the body.
- 4. Lower the body onto the stands.
- 5. Shut the engine off and remove ignition key.
- 6. De-energize all hydraulics.
- 7. Place steering wheel cover on steering wheel of tractor.
- 8. Turn battery disconnect off and lock/tag-out the disconnect.
- 9. Double chock/block the wheels.

#### **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

#### PROCEDURES TO PLACE DUMP BODY TRAILERS BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Signature:	Date:
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#### PERFORMING MAINTENANCE, REPAIR OR SERVICING OF WOOD GRINDER.

#### POTENTIAL ENERGY SOURCES:

• air pressure • chemical reaction

electrical

• flammability

• heat

• hydraulic pressure

• mechanical

gravity

#### LOCKOUT METHOD(S):

• battery disconnect

circuit lockout

handle/valve lockout

• remove air fitting/nipple

• wheel chock/blocks

• plug lockout

# TAG-OUT METHOD(S):

• Do Not Start Tag

• Do Not Energize Tag

• Do Not Open Tag

• Do Not Operate Tag

• Do Not Close Tag

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Shut down the unit.
- 2. Remove key at the control panel.
- 3. Shut down and lock-out/tag-out the main power disconnect.
- 4. Shut down and lock-out/tag-out the power disconnect at the unit.
- 5. Install lock-out/tag-out at the control panel.
- 6. Block or Brace all prime movers, drums, and gears

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

#### PROCEDURES TO PLACE WOOD GRINDER BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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#### CLEANING OUT BEHIND THE BLADE ON ALL TRUCKS

#### POTENTIAL ENERGY SOURCES:

air pressure
chemical reaction
electrical
flammability
heat
hydraulic pressure
mechanical
gravity

LOCKOUT METHOD(S):

• battery disconnect • circuit lockout • handle/valve lockout

remove air fitting/nipple
 wheel chock/blocks
 plug lockout

TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Open Tag
 Do Not Open Tag
 Steering Wheel Cover (Do Not Operate or Start)

#### SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Extend blade cylinder as far out as possible.
- 3. Place body on stands (Manual Side Load)
- 4. Shut down hydraulic pump.
- 5. Relieve hydraulic pressure from all cylinders.
- 6. Shut the engine off and remove ignition key.
- 7. Place steering wheel cover on steering wheel.
- 8. Chock/block the wheels.
- 9. Turn battery disconnect off and lock/tag-out the disconnect.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date:	Signature:



#### CLEANING TAILGATE SEAL

#### POTENTIAL ENERGY SOURCES:

air pressure

• chemical reaction

• electrical

flammability

• heat

• hydraulic pressure

mechanical

gravity

#### LOCKOUT METHOD(S):

• battery disconnect

• circuit lockout

• handle/valve lockout

• remove air fitting/nipple

· wheel chock/blocks

· plug lockout

#### TAG-OUT METHOD(S):

• Do Not Start Tag

Do Not Energize Tag

• Do Not Open Tag

• Do Not Operate Tag

• Do Not Close Tag

• Steering Wheel Cover (Do Not Operate or Start)

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Extend prop rod to support tailgate.
- 3. Lower tailgate until it is supported only by the prop rod.
- 4. Shut the engine off and remove ignition key.
- 5. Place steering wheel cover on steering wheel.
- 6. Chock/block the wheels
- 7. Turn battery disconnect off and lock/tag-out the disconnect.
- 8. Use a shovel, broom or stick to clean.

#### NEVER GO UNDER A RAISED TAILGATE FOR ANY REASON UNTIL IT IS SUPPORTED.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date:	 Signature:	



#### CLEANING OUT COMPACTOR MACHINE

# POTENTIAL ENERGY SOURCES:

• air pressure • chemical reaction

• electrical

flammability

heat

• hydraulic pressure

mechanical

gravity

# **LOCKOUT METHOD(S):**

• battery disconnect

circuit lockout

handle/valve lockout

• remove air fitting/nipple

wheel chock/blocks

plug lockout

#### TAG-OUT METHOD(S):

• Do Not Start Tag

• Do Not Energize Tag

• Do Not Open Tag

• Do Not Operate Tag

◆ Do Not Close Tag

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Retract ram to the home or fully retracted position.
- 2. Put blade in the forward position.
- 3. Release stored energy.
- 4. Shut down compactor and remove key.
- 5. Lock-out/tag-out all energy sources.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.
- 4. Turn circuit breaker "on" and/or plug in equipment.

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# CRAWLING UNDER DETACHED TRAILERS OR UNLOADING TRAILER

#### **POTENTIAL ENERGY SOURCES:**

air pressure

• chemical reaction

electrical

• flammability

heat

• hydraulic pressure

mechanical

gravity

# **LOCKOUT METHOD(S):**

• battery disconnect

• circuit lockout

• handle/valve lockout

• remove air fitting/nipple

wheel chock/blocks

plug lockout

## TAG-OUT METHOD(S):

• Do Not Start Tag

Do Not Energize Tag

• Do Not Open Tag

• Do Not Operate Tag

• Do Not Close Tag

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Chock/block at least 2 wheels.
- 2. Place kingpin jack under trailer (do not rely on dolly legs to support trailer).

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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#### ROLL OFF /DROP BOX REMOVING DEBRIS FROM BOX

#### **POTENTIAL ENERGY SOURCES:**

• air pressure

• chemical reaction

electrical

flammability

heat

• hydraulic pressure

mechanical

gravity

#### LOCKOUT METHOD(S):

• battery disconnect

circuit lockout

handle/valve lockout

• remove air fitting/nipple

wheel chock/blocks

· plug lockout

#### TAG-OUT METHOD(S):

• Do Not Start Tag

• Do Not Energize Tag

Do Not Open Tag

• Do Not Operate Tag

• Do Not Close Tag

• Steering Wheel Cover (Do Not Operate or Start)

#### SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Lower box to ground.
- 2. Set the parking brake.
- 3. Release stored energy including all tension from cable.
- 4. Turn the engine off and remove the ignition key.
- 5. Place steering wheel cover on steering wheel.
- 6. Turn battery disconnect off and lock/tag-out the battery disconnect.
- 7. Double chock/block the wheels.

#### NEVER ENTER ANY BOX WHILE ELEVATED

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

#### PROCEDURES TO PLACE COMPACTOR BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.
- 4. Turn circuit breaker "on" and/or plug in equipment.

Date:	Signature:



#### PORTABLE HEATER

#### **POTENTIAL ENERGY SOURCES:**

• air pressure • chemical reaction

electrical

· flammability

heat

• hydraulic pressure

mechanical

gravity

# **LOCKOUT METHOD(S):**

• battery disconnect

• circuit lockout

• handle/valve lockout

• remove air fitting/nipple

wheel chock/blocks

plug lockout

## TAG-OUT METHOD(S):

• Do Not Start Tag

• Do Not Energize Tag

• Do Not Open Tag

• Do Not Operate Tag

• Do Not Close Tag

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Turn "off" the heater and unplug the unit.
- 2. Place lockout plug device and lockout.
- 3. Place an "out of service" sign on unit.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove the plug lock out device.
- 4. Remove the "out of service" sign.

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#### PERFORMING MAINTENANCE, REPAIR, SERVICING, OR CLEANING OF FANS

# POTENTIAL ENERGY SOURCES:

air pressure
chemical reaction
electrical
flammability
heat
hydraulic pressure
mechanical
gravity

**LOCKOUT METHOD(S):** 

• battery disconnect • circuit lockout • handle/valve lockout

remove air fitting/nipple
 wheel chock/blocks
 plug lockout

TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Open Tag

Do Not Operate Tag
 Do Not Close Tag

#### SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Turn "off" fan.
- 2. Turn "off" circuit breaker or unplug and utilize the appropriate lock-out/tag-out device.
- 3. Test lockout by turning fan "on" and verify that the fan is de-energized.
- 4. Place an "out of service" tag on the fan.

# <u>VERIFY ISOLATION OF EQUIPMENT</u>

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

## PROCEDURES TO PLACE THE FAN BACK IN SERVICE:

Inspect the equipment to be sure that:

- 1. All tools and other materials are removed.
- 2. Machine/equipment is fully reassembled.
- 3. Guards and other safety devices are installed.
- 4. Remove the lockout device and plug in or turn "on" circuit breaker for the fan.
- 5. Remove the "out of service" tag.

Date:	Signature:	



#### PERFORMING MAINTENANCE OR REPAIR ON BUILDING ELECTRICAL CIRCUITS

# POTENTIAL ENERGY SOURCES:

air pressure
chemical reaction
electrical
flammability
heat
hydraulic pressure
mechanical
gravity

#### **LOCKOUT METHOD(S):**

battery disconnect
 remove air fitting/nipple
 circuit lockout
 handle/valve lockout
 plug lockout

# TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Open Tag
 Do Not Close Tag

#### SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Shut off electricity at the circuit breaker.
- 2. Install circuit breaker lockout cleat.
- 3. Install lockout tag on circuit panel.
- 4. Test circuit breaker to ensure power is off.

# <u>VERIFY ISOLATION OF EQUIPMENT</u>

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

#### PROCEDURES TO PLACE BUILDING ELECTRICAL CIRCUITS BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.
- 4. Turn circuit breaker in the "on" position.

Date:	Signature:	



# **LADDERS**

- Mechanical
- Gravity

# **LOCKOUT METHOD(S)**:

- Chain
- Tape

#### TAG-OUT METHOD(S):

- Out of service tag/sign
- Caution tape

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Wrap a chain or tape around the ladder in such a way as to render it unusable.
- 2. Tag "out of service."

\*\*\*\*NOTE:\*\*\*\* If the ladder cannot be placed back in service, destroy it and throw it out.

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# PROCEDURES TO PLACE LADDERS BACK IN SERVICE:

- Inspect the ladder to be sure it's safe to put back in service.
- Remove the tape or chain.
- Remove the "out of service" tag.

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# HIGH PRESSURE TOILET

# POTENTIAL ENERGY SOURCES:

air pressure
 chemical reaction
 heat
 hydraulic pressure
 electrical
 flammability
 water pressure
 water pressure

# **LOCKOUT METHOD(S):**

battery disconnect
 circuit lockout
 handle/valve lockout

remove air fitting/nipple
 wheel chock/blocks
 plug lockout

## TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Open Tag

Do Not Operate Tag
 Do Not Close Tag

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Turn "off" water at the valve closest to the toilet.
- 2. Install the valve lockout device and lockout.
- 3. Drain the tank.
- 4. Tag the toilet "out of service" or cord off the area with caution tape.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

# PROCEDURES TO THE TOILET BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Remove the valve lockout device and turn the valve "on".
- 3. Remove the "out of service" sign and/or caution tape.

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# RESIDENTIAL ONE PASS TRUCK (MECHANICS)

#### **POTENTIAL ENERGY SOURCES:**

air pressure
chemical reaction
electrical
flammability
heat
hydraulic pressure
mechanical
gravity

# **LOCKOUT METHOD(S):**

battery disconnect
 circuit lockout
 handle/valve lockout

remove air fitting/nipple
 wheel chock/blocks
 plug lockout

## TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Close Tag
 Do Not Open Tag
 Do Not Open Tag
 Steering Wheel Cover (Do Not Operate or Start)

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Release stored energy.
- 3. Turn the engine off and remove ignition key.
- 4. Place steering wheel cover on steering wheel.
- 5. Turn battery disconnect off and lock/tag-out the disconnect.
- 6. Double chock/block the wheels.

# **VERIFY ISOLATION OF EQUIPMENT**

### Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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#### PERFORMING REPAIR, SERVICING, OR CLEANING OF IMPACT CRUSHER.

#### POTENTIAL ENERGY SOURCES:

air pressure
 chemical reaction
 lectrical
 flammability
 mechanical
 gravity

#### **LOCKOUT METHOD(S):**

battery disconnect
 remove air fitting/nipple
 circuit lockout
 handle/valve lockout
 plug lockout

# TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Open Tag
 Do Not Close Tag

#### SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Shut down main control panel and apply lock-out/tag-out.
- 2. Shut down the main electrical box and apply lock-out/tag-out.
- 3. Release stored energy.
- 4. Try the "on/off" switch on crusher to be certain power is "off".
- 5. Place "out of service" sign and if necessary use caution tape.
- 6. Block or Brace all prime movers, drums, and gears

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

# PROCEDURES TO PLACE IMPACT CRUSHER BACK IN SERVICE:

- 1. Inspect the Crusher to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date:	Signature:	
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# UNJAMMING CONVEYOR BELT OR PERFORMING MAINTENANCE, REPAIR, SERVICING OR CLEANING OF CONVEYOR.

# POTENTIAL ENERGY SOURCES:

• air pressure • chemical reaction

nical reaction • electrical

flammability

heat
 hydraulic pressure

gravity

#### **LOCKOUT METHOD(S):**

• battery disconnect

• circuit lockout

• handle/valve lockout

• remove air fitting/nipple

• wheel chock/blocks

• plug lockout

mechanical

#### TAG-OUT METHOD(S):

• Do Not Start Tag

• Do Not Energize Tag

• Do Not Open Tag

• Do Not Operate Tag

• Do Not Close Tag

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Shut down main control panel and apply lock-out/tag-out.
- 2. Shut down the main electrical box and apply lock-out/tag-out.
- 3. Release stored energy.
- 4. Try the "on/off" switch on crusher to be certain power is "off".
- 5. Place "out of service" sign and if necessary use caution tape.
- 6. Block or Brace all prime movers, drums, and gears

#### **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

#### PROCEDURES TO PLACE CONVEYOR BELT BACK IN SERVICE:

- 1. Inspect the conveyor belt to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date:	Signature:







#### PRESSURE WASHER

#### **POTENTIAL ENERGY SOURCES:**

air pressure

- chemical reaction
- electrical
- flammability

- heat
- hydraulic pressure
- mechanical
- water pressure

## **LOCKOUT METHOD(S)**:

battery disconnect

- circuit lockout
- handle/valve lockout

plug lockout

- remove air fitting/nipple
- wheel chock/blocks
- remove spark plug and gas

#### TAG-OUT METHOD(S):

• Do Not Start Tag

- Do Not Energize Tag
- Do Not Open Tag

- Do Not Operate Tag
- Do Not Close Tag

#### **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# <u>SPECIFIC LOCK-OUT/TAG-OUT PROCEDU</u>RES:

- 1. Turn pressure washer "off".
- 2. Turn off soap and water supply valves and place valve lock-out/tag-out.
- 3. Relieve any existing pressure in the spray hose or nozzle.
- 4. Remove spark plug and, if necessary, the gas.
- 5. Place an "out of service" sign.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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#### RESIDENTIAL ONE PASS TRUCK

WHEN ANY PART OF THE DRIVERS' BODY IS GOING TO BE UNDERNEATH THE RAISED TAILGATE AND/OR DISLODGING JAMMED RECYCLABLES

#### **POTENTIAL ENERGY SOURCES:**

air pressure
chemical reaction
electrical
flammability
mechanical
gravity

#### **LOCKOUT METHOD(S):**

battery disconnect
 remove air fitting/nipple
 circuit lockout
 handle/valve lockout
 plug lockout

#### TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Open Tag

Do Not Operate Tag
 ◆ Do Not Close Tag
 ◆ Steering Wheel Cover (Do Not Operate or Start)

#### SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Shut engine off and remove ignition key.
- 3. Place steering wheel cover on steering wheel.
- 4. Chock/block the wheels
- 5. Turn battery disconnect off and lock-out/tag-out disconnect.
- 6. Support bin or tailgate with: a) Appropriately rated chain fall, or; b) Install cylinder safety lock (sleeve), or; c) Use tailgate stand with adequate base, or; d) Block with 6 X 6 wood blocks, or; e) Use the safety pins provided by the manufacturer.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed
- 3. Remove lockout devices along with their own locks and tags.

Date:	Signature:



# RESIDENTIAL ONE PASS TRUCK CLEANING OUT THE TRAPS ON ROUTE OR AT DISPOSAL

#### POTENTIAL ENERGY SOURCES:

air pressure
chemical reaction
electrical
flammability
heat
hydraulic pressure
mechanical
gravity

# LOCKOUT METHOD(S):

battery disconnect
 circuit lockout
 handle/valve lockout

remove air fitting/nipple
 wheel chock/blocks
 plug lockout

# TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Operate Tag
 Do Not Close Tag
 Steering Wheel Cover (Do Not Operate or Start)

#### SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Place the trucks safety props in the stands.
- 3. Release stored energy.
- 4. Turn of the engine and remove the ignition key.
- 5. Place steering wheel cover on steering wheel.
- 6. Chock/block the wheels.
- 7. Turn battery disconnect off and lock/tag-out the disconnect.

#### **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

#### PROCEDURES TO PLACE VEHICLE BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.



#### **ROLL UP BAY DOORS**

#### **POTENTIAL ENERGY SOURCES:**

• chemical reaction air pressure • heat

• electrical • hydraulic pressure

flammability

mechanical

gravity

#### LOCKOUT METHOD(S):

• battery disconnect

circuit lockout

• handle/valve lockout

• remove air fitting/nipple

wheel chock/blocks

plug lockout

# TAG-OUT METHOD(S):

• Do Not Start Tag

• Do Not Energize Tag

• Do Not Open Tag

• Do Not Operate Tag

• Do Not Close Tag

#### SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

# \*\* Note \*\* Service on doors will primarily be conducted by an outside contractor.

- 1. Place door in the desired servicing position.
- 2. Turn "off" the circuit breaker and place a circuit breaker lockout device and lock-out/tag-out.
- 3. Place a mechanical locking rod in position to stop door from moving.
- 4. Place an "out of service" sign and if necessary use caution tape.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the roll up bay door to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Remove the mechanical locking rod.
- 3. Remove the circuit breaker lockout device and turn circuit breaker to "on."
- 4. Remove "out of service" sign and caution tape.

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# PERFORMING MAINTENANCE, REPAIR, OR CLEANING OF ELECTRICAL POWERED EQUIPMENT

#### POTENTIAL ENERGY SOURCES:

• air pressure • chemical reaction

electrical

flammability

heat

• hydraulic pressure

• mechanical

gravity

## **LOCKOUT METHOD(S):**

battery disconnect

• circuit lockout

• handle/valve lockout

• remove air fitting/nipple

wheel chock/blocks

plug lockout

#### TAG-OUT METHOD(S):

• Do Not Start Tag

• Do Not Energize Tag

• Do Not Open Tag

• Do Not Operate Tag

◆ Do Not Close Tag

# SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Unplug equipment and/or shut down electricity at the circuit breaker.
- 2. Install plug lock-out/tag-out or circuit breaker lockout cleat.
- 3. Test equipment by turning switch to the "on" position.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.
- 4. Turn circuit breaker "on" and/or plug in equipment.

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#### AIR COMPRESSORS/AIR LINES

#### POTENTIAL ENERGY SOURCES:

air pressure
chemical reaction
electrical
flammability
mechanical
gravity

# **LOCKOUT METHOD(S):**

battery disconnect
 circuit lockout
 handle/valve lockout

remove air fitting/nipple
 wheel chock/blocks
 plug lockout

# TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Open Tag
 Do Not Operate Tag
 Do Not Close Tag
 Steering Wheel Cover (Do Not Operate or Start)

#### SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Turn "off" air compressor at the circuit breaker or remove plug.
- 2. Install a circuit breaker lockout device or plug lockout device and lock out.
- 3. If servicing just the compressor, turn air line valve "off" and place valve lockout device and lock out/tag-out.
- 4. Drain system (lines and tank) of any pressurized air.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date:	Signature:



#### **BALER**

#### POTENTIAL ENERGY SOURCES:

- air pressure
- · chemical reaction
- electrical
- flammability

- heat
- hydraulic pressure
- mechanical
- gravity

#### LOCKOUT METHOD(S):

- battery disconnect
- circuit lockout
- handle/valve lockout
- plug lockout

- remove air fitting/nipple
- wheel chock/blocks
- remove key

## TAG-OUT METHOD(S):

- Do Not Start Tag
- Do Not Energize Tag
- Do Not Open Tag

- Do Not Operate Tag
- Do Not Close Tag

#### SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

# 1. Shut down power supply and lock-out/tag-out.

- 2. Try the "on/off" switch on the baler to be certain that the power is "off."
- 3. Remove the key from the baler put key in pocket.
- 4. install "out of service" tag
- 5. Block or Brace all prime movers, drums, and gears

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date:	Signature:	



#### **CHOP SAW**

#### **POTENTIAL ENERGY SOURCES:**

air pressurechemical reaction

• electrical

• flammability

heat
 hydraulic pressure

mechanicalgravity

#### LOCKOUT METHOD(S):

battery disconnect

circuit lockout

• handle/valve lockout

• remove air fitting/nipple

wheel chock/blocks

• plug lockout

# TAG-OUT METHOD(S):

• Do Not Start Tag

Do Not Energize Tag

• Do Not Open Tag

• Do Not Operate Tag

Do Not Close Tag

### SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Turn chop saw off.
- 2. Unplug chop saw and place the plug into a plug lockout device. Test the lockout by depressing the trigger.
- 3. Place an "out of service" tag on the chop saw.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

# PROCEDURES TO PLACE CHOP SAW BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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## **CRIMP MACHINE**

#### **POTENTIAL ENERGY SOURCES:**

• air pressure • chemical reaction • electrical

hydraulic pressuremechanical

• flammability

gravity

# **LOCKOUT METHOD(S):**

• battery disconnect

heat

circuit lockout

• handle/valve lockout

• remove air fitting/nipple

wheel chock/blocks

plug lockout

## TAG-OUT METHOD(S):

• Do Not Start Tag

• Do Not Energize Tag

• Do Not Open Tag

Do Not Operate Tag

# • Do Not Close Tag

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Turn off the crimp machine.
- 2. Unplug the crimp machine and place the plug in a plug lockout device.
- 3. Place an "out of service" sign on the crimper.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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#### **DRILL PRESS**

#### **POTENTIAL ENERGY SOURCES:**

air pressure
 heat
 heat
 electrical
 mechanical
 flammability
 gravity

**LOCKOUT METHOD(S):** 

battery disconnect
 circuit lockout
 handle/valve lockout

remove air fitting/nipple
 wheel chock/blocks
 plug lockout

TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Open Tag

Do Not Operate Tag
 Do Not Close Tag

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Turn off the drill press and let it return to the stop.
- 2. Unplug the press and place plug in a plug lockout device.
- 3. Place and "out of service" sign on the drill press.

# <u>VERIFY ISOLATION OF EQUIPMENT</u>

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

#### PROCEDURES TO PLACE DRILL PRESS BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date:	Signature:	



flammability

#### **DROP LIGHTS**

#### **POTENTIAL ENERGY SOURCES:**

air pressurechemical reactionelectrical

heat
 hydraulic pressure
 mechanical
 gravity

# **LOCKOUT METHOD(S):**

battery disconnect
 circuit lockout
 handle/valve lockout

remove air fitting/nipple
 wheel chock/blocks
 plug lockout

#### TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Open Tag

Do Not Operate Tag
 Do Not Close Tag

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Turn off the droplight.
- 2. Unplug or turn off circuit breaker and utilize the appropriate lockout device. Verify lockout by turning light on.
- 3. Tag the light "out of service."

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

# PROCEDURES TO PLACE DROP LIGHTS BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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#### FILTER BUGGY

## **POTENTIAL ENERGY SOURCES:**

• air pressure • chemical reaction

electrical

• flammability

heat

• hydraulic pressure

• mechanical

• gravity

### LOCKOUT METHOD(S):

• battery disconnect

• circuit lockout

• handle/valve lockout

• remove air fitting/nipple

• wheel chock/blocks

• plug lockout

# TAG-OUT METHOD(S):

• Do Not Start Tag

Do Not Energize TagDo Not Close Tag

Do Not Open Tag

Do Not Operate Tag

# SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Turn off the filter buggy.
- 2. Unplug the filter buggy and place plug in a plug lockout device.
- 3. Place an "out of service" tag on the filter buggy.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

#### PROCEDURES TO PLACE FILTER BUGGY BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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#### FLOOR BUFFER

# POTENTIAL ENERGY SOURCES:

• air pressure • chemical reaction • electrical • flammability

heat
 hydraulic pressure
 mechanical
 gravity

# **LOCKOUT METHOD(S):**

battery disconnect
 circuit lockout
 handle/valve lockout

remove air fitting/nipple
 wheel chock/blocks
 plug lockout

#### TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Open Tag

Do Not Operate Tag
 Do Not Close Tag

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Unplug the floor buffer and place plug in a plug lockout device.
- 2. Place an "out of service" tag on the floor buffer.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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#### FLOOR SCRUBBER

#### **POTENTIAL ENERGY SOURCES:**

air pressure

chemical reaction

electrical

• flammability

heat

• hydraulic pressure

mechanical

gravity

# **LOCKOUT METHOD(S):**

• battery disconnect

circuit lockout

• handle/valve lockout

• plug lockout

• remove air fitting/nipple

wheel chock/blocks

disconnect battery cable

#### TAG-OUT METHOD(S):

• Do Not Start Tag

• Do Not Energize Tag

Do Not Open Tag

• Do Not Operate Tag

• Do Not Close Tag

• Steering Wheel Cover (Do Not Operate or Start)

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Turn floor scrubber off.
- 2. Disconnect the battery cables and place them in a plug lockout device.
- 3. Place an "out of service" sign on the floor scrubber.

#### **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

## PROCEDURES TO PLACE FLOOR SCRUBBER BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date:	Signature:



#### FLOOR SWEEPER

#### **POTENTIAL ENERGY SOURCES:**

air pressure
 heat
 heat
 electrical
 mechanical
 flammability
 gravity

**LOCKOUT METHOD(S):** 

• battery disconnect • circuit lockout • handle/valve lockout • plug lockout

remove air fitting/nipple
 wheel chock/blocks
 remove battery cables

TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Open Tag

Do Not Operate Tag
 Do Not Close Tag
 Steering Wheel Cover (Do Not Operate or Start)

#### **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Turn floor sweeper off.
- 2. Disconnect battery cables and place them in a plug lockout device.
- 3. Place an "out of service" sign on the sweeper.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

# PROCEDURES TO PLACE FLOOR SWEEPER BACK IN SERVICE:

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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#### FLOOR, TRANSMISSION & REAR JACKS

#### **POTENTIAL ENERGY SOURCES:**

air pressure
chemical reaction
leetrical
flammability
gravity

# **LOCKOUT METHOD(S):**

battery disconnect
 remove air fitting/nipple
 circuit lockout
 handle/valve lockout
 plug lockout
 chain

#### TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Open Tag
 Do Not Close Tag

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Lower jack all the way by opening the bleeder valve.
- 2. Remove the air nipple if jack is air activated. If not, wrap a chain around the jack in such a way as to make it impossible to use.
- 3. Tag the jack "out of service."

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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#### GRINDERS (AIR/BENCH/HAND)

# POTENTIAL ENERGY SOURCES:

air pressure
chemical reaction
electrical
flammability
heat
hydraulic pressure
mechanical
gravity

#### LOCKOUT METHOD(S):

battery disconnect
 remove air fitting/nipple
 circuit lockout
 handle/valve lockout
 plug lockout

# TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Open Tag
 Do Not Close Tag

#### SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Turn off grinder.
- 2. Unplug (electric) and place plug in a plug lockout device or disconnect the air supply line (pneumatic) and remove the air nipple.
- 3. Verify that the grinder is not energized by turning on or depressing the trigger.
- 4. Tag grinder "out of service."

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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#### PARTS CLEANER

#### **POTENTIAL ENERGY SOURCES:**

air pressure
 heat
 heat
 electrical
 mechanical
 gravity

# **LOCKOUT METHOD(S):**

battery disconnect
 remove air fitting/nipple
 circuit lockout
 handle/valve lockout
 plug lockout
 chain/tape shut

# TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Open Tag
 Do Not Close Tag

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Turn off solvent circulator pump.
- 2. Unplug pump and place plug in a plug lockout device.
- 3. Remove parts cleaner machine from the solvent storage drum, cover drum.
- 4. Tag "out of service."

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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#### STEAM CLEANERS

#### **POTENTIAL ENERGY SOURCES:**

• air pressure • chemical reaction • electrical

hydraulic pressuremechanical

flammability

· water pressure

# **LOCKOUT METHOD(S):**

battery disconnect

heat

circuit lockout

• handle/valve lockout

• remove air fitting/nipple

wheel chock/blocks

plug lockout

# TAG-OUT METHOD(S):

• Do Not Start Tag

• Do Not Energize Tag

Do Not Open Tag

• Do Not Operate Tag

Do Not Close Tag

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Turn steam cleaner off.
- 2. Turn off the circuit breaker and the water, natural gas and soap supply valves.
- 3. Place a lock on the circuit breaker box and valve lockout devices on the soap and water supply valves.
- 4. Place an "out of service" tag on the steam cleaner.
- 5. Drain the system of any pressurized water.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 3. Notify affected employees that the lock-out/tag-out is being removed.
- 4. Remove lockout devices along with their own locks and tags.

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#### THE FUEL ISLAND

# POTENTIAL ENERGY SOURCES:

air pressure
 chemical reaction
 electrical
 flammability

heat
 hydraulic pressure
 mechanical
 gravity

#### **LOCKOUT METHOD(S):**

battery disconnect
 circuit lockout
 handle/valve lockout

remove air fitting/nipple
 wheel chock/blocks
 plug lockout

#### TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Open Tag

Do Not Operate Tag
 Do Not Close Tag

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Turn off pump and shut off circuit breaker.
- 2. Place a circuit breaker lockout device on the circuit breaker.
- 3. Verify that the pump is locked out using the pump-dispensing nozzle into an approved container. If appropriate, lockout dispensing nozzles.
- 4. Place an "out of service" sign at the fuel island.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date:	Signature:	



flammability

#### TIRE BRANDER

#### **POTENTIAL ENERGY SOURCES:**

• air pressure • chemical reaction • electrical

heat
 hydraulic pressure
 mechanical
 gravity

#### **LOCKOUT METHOD(S):**

battery disconnect
 circuit lockout
 handle/valve lockout

remove air fitting/nipple
 wheel chock/blocks
 plug lockout

#### TAG-OUT METHOD(S):

Do Not Start Tag
 Do Not Energize Tag
 Do Not Open Tag

Do Not Operate Tag
 Do Not Close Tag

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Unplug tire brander and allow to cool.
- 2. Place the plug in a plug lockout device.
- 3. Place an "out of service" tag on the tire brander.

# <u>VERIFY ISOLATION OF EQUIPMENT</u>

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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#### **TORCHES**

#### **POTENTIAL ENERGY SOURCES:**

• air pressure • chemical reaction

electricalmechanical

• flammability

heat
 hydraulic pressure

gravity

# **LOCKOUT METHOD(S):**

• battery disconnect

circuit lockout

• handle/valve lockout

• remove air fitting/nipple

wheel chock/blocks

plug lockout

#### TAG-OUT METHOD(S):

• Do Not Start Tag

• Do Not Energize Tag

• Do Not Open Tag

• Do Not Operate Tag

• Do Not Close Tag

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. install "out of service" tag
- 2. Remove torch head from hoses.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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#### VACUUM CLEANER

# POTENTIAL ENERGY SOURCES:

- air pressure
   chemical reaction
   electrical
   flammability
- heat
   hydraulic pressure
   mechanical
   gravity

# **LOCKOUT METHOD(S):**

- battery disconnect
   circuit lockout
   handle/valve lockout
- remove air fitting/nipple
   wheel chock/blocks
   plug lockout

#### TAG-OUT METHOD(S):

- Do Not Start Tag
   Do Not Energize Tag
   Do Not Open Tag
- Do Not Operate Tag
   Do Not Close Tag

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. install "out of service" Tag
- 2. Disconnect power cord and lock out with lock out device.

# <u>VERIFY ISOLATION OF EQUIPMENT</u>

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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#### **VISES**

#### **POTENTIAL ENERGY SOURCES:**

- air pressurechemical reaction
- heat
   hydraulic pressure
- electrical
- flammability
- mechanical
- gravity

# **LOCKOUT METHOD(S):**

- battery disconnect
- circuit lockout
- handle/valve lockout
- remove air fitting/nipple wheel ch
- wheel chock/blocks
- plug lockout

#### TAG-OUT METHOD(S):

- Do Not Start Tag
- Do Not Energize Tag
- Do Not Open Tag

- Do Not Operate Tag
- Do Not Close Tag

# **SHUTDOWN PREPARATION:**

## Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. install "out of service" sign
- 2. Remove from work area.

# **VERIFY ISOLATION OF EQUIPMENT**

# Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

Date:	Signature:	
Date.	 Signature.	



#### **WELDERS**

# POTENTIAL ENERGY SOURCES:

• air pressure • chemical reaction

electrical

• flammability

heat
 hydraulic pressure

mechanical

gravity

# **LOCKOUT METHOD(S):**

battery disconnect

circuit lockout

• handle/valve lockout

• remove air fitting/nipple

wheel chock/blocks

• plug lockout

# TAG-OUT METHOD(S):

• Do Not Start Tag

• Do Not Energize Tag

• Do Not Open Tag

• Do Not Operate Tag

◆ Do Not Close Tag

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

#### SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Disconnect power source.
- 2. Place "out of service" tag
- 3. Test unit for any stored energy

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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#### PICKUP & SERVICE TRUCKS

#### **POTENTIAL ENERGY SOURCES:**

air pressure

chemical reaction

electrical

• flammability

• heat

• hydraulic pressure

mechanical

gravity

# **LOCKOUT METHOD(S):**

• battery disconnect

circuit lockout

handle/valve lockout

• remove air fitting/nipple

• wheel chock/blocks

plug lockout

## TAG-OUT METHOD(S):

• Do Not Start Tag

• Do Not Energize Tag

• Do Not Open Tag

• Do Not Operate Tag

• Do Not Close Tag

• Steering Wheel Cover (Do Not Operate or Start)

# **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Shut the engine off and remove ignition key.
- 3. Place steering wheel cover on steering wheel.
- 4. Double chock/block wheels.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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# Roll off / Drop box Trucks

#### **POTENTIAL ENERGY SOURCES:**

 air pressure chemical reaction electrical

flammability

• hydraulic pressure

mechanical

gravity

# **LOCKOUT METHOD(S):**

battery disconnect

circuit lockout

• handle/valve lockout

• remove air fitting/nipple

wheel chock/blocks

plug lockout

#### TAG-OUT METHOD(S):

• Do Not Start Tag

• Do Not Energize Tag

Do Not Open Tag

• Do Not Operate Tag

Do Not Close Tag

• Steering Wheel Cover (Do Not Operate or

heat

#### **SHUTDOWN PREPARATION:**

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1. Set the parking brake.
- 2. Release stored energy.
- 3. Turn the engine off and remove ignition key.
- 4. Place steering wheel cover on steering wheel.
- 5. Turn battery disconnect off and lock/tag-out the battery disconnect.
- 6. Double chock/block the wheels.

# **VERIFY ISOLATION OF EQUIPMENT**

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1. Inspect the equipment to be sure that:
  - a. All tools and other materials are removed.
  - b. Machine/equipment is fully reassembled.
  - c. Guards and other safety devices are installed.
- 2. Notify affected employees that the lock-out/tag-out is being removed.
- 3. Remove lockout devices along with their own locks and tags.

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• air pressure

• chemical reaction

electrical

flammability

• heat

• hydraulic pressure

mechanical

gravity

#### LOCKOUT METHOD(S):

• battery disconnect

• circuit lockout

• handle/valve lockout

• remove air fitting/nipple

wheel chock/blocks

• plug lockout

#### TAG-OUT METHOD(S):

• Do Not Start Tag

• Do Not Energize Tag

• Do Not Open Tag

• Do Not Operate Tag

• Do Not Close Tag

• Steering Wheel Cover (Do Not Operate or Start)

# SHUTDOWN PREPARATION:

Authorized employees will:

- Identify all sources of energy supplying the system, the types of hazards they present, how to control them, and how to verify the hazardous energy is not present.
- Notify all affected employees about the lockout.

# SPECIFIC LOCK-OUT/TAG-OUT PROCEDURES:

- 1.
- 2.
- 3.
- 4.

# <u>VERIFY ISOLATION OF EQUIPMENT</u>

Authorized employees will:

- Make sure no one is exposed to any areas of danger.
- Verify, using appropriate test equipment, or other means, that all the energy sources are controlled, dissipated, and disconnected, including the main disconnect switch or circuit breaker.
- Operate the start buttons and other equipment controls to make certain the equipment will not operate.
- Return all operating controls to their "off" or safe position after the test is completed.

- 1.
- 2.
- 3.

Date:	Signature:	
Date.	Signature.	



# CONTROL OF HAZARDOUS ENERGY-LOCK-OUT/TAG-OUT

# **Lock Out Tag Out Training Acknowledgement for Affected Employees**

I understand that as an affected employee I have received instruction in the purpose and use of the energy control procedure, the prohibition of removing locks or tags or attempts to restart equipment that has been locked out or tagged.

Employee Name	Employee Signature
Date	
Trainer	-



		PROTOCOLS - ATTACHMENT 66
Date of Review	Signature	Comments – Changes to Program